The added value of scaffolding the self and peer assessment process in a wiki-based CSCL-environment in Higher Education

Mario Gielen, Bram De Wever, Department of Educational Studies,
Ghent University, Dunantlaan 2, 9000 Gent, Belgium
Email: mario.gielen@ugent.be, bram.dewever@ugent.be

Abstract: The present project focuses on how students' learning can be enhanced in CSCL. A growing body of research emphasizes on the added value of assessment for learning in students' learning process. Therefore, the central intervention under study incorporates structure or so-called *scaffolds* in the assessment process in CSCL. The aim is to study the added value of scaffolding the self and peer assessment process in a wiki-based CSCL-environment in first-year Higher Education by focusing on (1) students' perception towards assessment, (2) feedback quality, and (3) product improvement during the assessment process.

Background and goals

CSCL facilitates authentic problems and issues in an educational online environment and it has the potential to foster "new learning experiences that many students have not encountered before" (Fischer, Kollar, Stegmann, & Wecker, 2013, p. 56) – such as collaborative writing and editing of wikis (Cress & Kimmerle, 2008). However, effective collaborative learning cannot be ensured by merely involving students in a CSCL-environment (Soller, 2001). In this respect, literature recommends *collaboration scripts* to scaffold collaborative learning in a certain way to "trigger engagement in social and cognitive activities that would otherwise occur rarely or not all at" (Kobbe, et al., 2007, p. 212). Related to this, previous research highlights learning benefits when structure is provided in a CSCL-environment (Strijbos & Weinberger, 2010), and particularly when structure is offered with the purpose further specifying the roles and activities for the learners involved (Schellens & Valcke, 2006). Therefore, the first two studies examine the added value of providing structure in the peer assessment process in a wiki-based CSCL environment.

New approaches of learning and instruction require new assessment practices (Strijbos & Sluijsmans, 2010). A quickly expanding body of literature emphasizes on the educational value of self-assessment (Hattie & Timperly, 2007) and peer assessment (Topping, 2009) to improve the effectiveness and quality of learning. Given that self-assessment is a requirement for effective learning, the development of self-assessment skills is fundamental in higher education (Boud, 1986). Therefore, the third and fourth study will focus on the added value of peer assessment as a scaffolding technique to develop students' self-assessment skills in a CSCL-environment. Previous research suggests wikis as an ideal CSCL-tool for supporting assessment activities and online collaboration (De Wever, Van Keer, Schellens, & Valcke, 2011).

Methodology

The different intervention studies adopt a quasi-experimental research design in which students are required to write a draft version, provide feedback and ultimately construct a final version of a writing assignment in a wiki-based CSCL-environment. The participants are first-year bachelor students Educational Sciences (N = 200), enrolled in the course Instructional Sciences at Ghent University.

Current status

The results of the first study showed that students who use a structured feedback form consider the received peer feedback (PFB) as more profound and detailed, and adopt a stronger critical attitude towards both providing and receiving PFB. Regarding the second study, the focus will be more on the feedback quality and more specifically on measuring the quality of the feedback through content analysis, which is widely used in the CSCL field (Strijbos & Stahl, 2007).

Particular issues to discuss

During the doctoral consortium, I would like to discuss strategies and particular schemes and/or models for analyzing the feedback content. Since previous research highlights deficiencies such as content validity and construct validity, the expertise of the consortium participants on how to employ content analysis would be extremely valuable. Secondly, I would like to "think aloud" with consortium participants on how alternative perspectives and scaffolding strategies could enhance and optimize the assessment process in CSCL. Since I am exactly at the transition phase between my first two studies and the next two, the input from the doctoral consortium could be essential at this particular moment to discuss my research design for study 3 and determine my future direction of the doctoral project.